AMENDMENTS TO THE CLAIMS:

The following listing of the claims replaces all previous versions, and listings, of the claims. Please cancel claims 1, 19, 23, 24, 25 (renumbered from 23), and 30 (renumbered from 28) without prejudice, and amend claims 26 to 29 (renumbered from 24 to 27) and 31 to 33 (renumbered from 29 to 31) as follows:

Claim 1. (canceled)

2. (previously presented) A data carrier comprising,

a holographic data memory consisting of a core layer, said core layer containing regions of different refractive index from which a holographic image may be reconstructed by exposure to incident light; and

an adjacent layer laminated to said core layer, said adjacent layer having an inner surface facing said core layer, said inner surface having an average roughness before lamination to the core layer of about 5 μm to 25 μm so as to result in a wavelength shift of the holographic image reconstructed from said core layer of about 20 nm.

3. (previously presented) The data carrier according to claim 2, wherein the inner surface has a stochastically distributed roughness.

4. (previously presented) The data carrier according to claim 2, wherein the inner surface has a roughness profile having a regular jagged relief.

5. (previously presented) The data carrier according to claim 2, wherein the adjacent layer includes a first area having a first roughness profile and a second area having a second roughness profile, wherein the first roughness profile is different from the second roughness profile.

6. (previously presented) The data carrier according to claim 5, wherein the first and second areas display information in the form of numbers, letters, geometric forms or images.

7. (previously presented) The data carrier according to clam 2, wherein the adjacent layer comprises at least one processible thermoplastic material.

8. (previously presented) The data carrier according to claim 2, wherein the adjacent layer comprises a paper-like material having at least one plastic laminated layer.

9. (previously presented) The data carrier according to claim 2, wherein the adjacent layer is imprinted.

10. (previously presented) The data carrier according to claim 2, wherein the holographic data memory includes at least one area that is locally shrunken or swollen.

11. (previously presented) The data carrier according to claim 10, wherein said at least one area that is shrunken or swollen is subjected to a temperature gradient towards a data carrier surface.

12. (previously presented) The data carrier according to claim 2, wherein an increased roughness of said adjacent layer corresponds to an increased shift of the wavelength of the holographic image to shorter wavelengths.

Claims 13 to 17. (canceled)

18. (previously presented) The data carrier according to claim 7, wherein the processible thermoplastic material includes polycarbonate (PC).

Claim 19. (canceled)

20. (previously presented) A method of manufacturing a data carrier with a holographic data memory, said method comprising the steps of:

a) providing a holographic data memory consisting of a core layer, said core layer containing regions of different refractive index from which a holographic image may be reconstructed by exposure to incident light, said core layer having a first surface;

b) providing an adjacent layer having an adjacent surface with a roughness; and

c) then laminating the adjacent layer to the core layer so that the adjacent surface of the adjacent layer is in contact with the first surface of the core layer;

wherein the adjacent surface of the adjacent layer has an average roughness of about 5 μm to 25 μm so as to produce a wavelength shift of the holographic image reconstructed from said core layer of at least 20 nm.

21. (previously presented) The method according to claim 20, wherein a regular relief is impressed onto a selected area of the adjacent surface through at least one of thermal and mechanical deformation.

22. (previously presented) The method according to claim 21, wherein the selected area corresponds to at least one of a geometric form, a number, a letter, and an image.

Claims 23 to 25. (canceled)

26 [[24]]. (currently amended) A data carrier comprising:

a holographic data memory consisting of a core layer of light-sensitive material in which regions of different refractive index are inserted by exposure to coherent radiation of a certain wavelength so that a holographic image may be reconstructed by refraction of incident light at said regions and interference within reflected light; and

an adjacent layer laminated to said core layer whose inner surface facing said core layer has a regular or irregular roughness pattern so as to shift the wavelength of said holographic image reconstructed from said core layer by said incident light;

~~The data carrier according to claim 25~~[[,]]

wherein said inner surface has an average roughness before lamination to the core layer of about 5 μm to 25 μm so as to result in a wavelength shift of the holographic image reconstructed from said core layer of about 20 nm.

27 [[25]]. (currently amended) The data carrier according to claim [[23]] 26, wherein the adjacent layer includes a first area having a first roughness profile and a second area having a second roughness profile, wherein the first roughness profile is different from the second roughness profile, and wherein the first and second areas display information in the form of numbers, letters, geometric forms or images.

28 [[26]]. (currently amended) The data carrier according to ~~clam 23~~ claim 26, wherein the adjacent layer comprises at least one thermoplastic material.

29 [[27]]. (previously presented) The data carrier according to claim 28 [[26], wherein the at least one thermoplastic material comprises polycarbonate.

Claim 30. (canceled)

31 [[29]]. (currently amended) A method of manufacturing a data carrier comprising the steps of:

a) providing a holographic data memory consisting of a core layer of light sensitive material in which regions of different refractive index have been inserted by exposure to coherent radiation of a certain wavelength so that a holographic image may be reconstructed by refraction of incident light at said regions and interference within reflected light;

b) providing an adjacent layer having an adjacent surface provided with a regular or irregular roughness; and

c) laminating said adjacent layer and said core layer so that said adjacent surface of said adjacent layer is firmly connected with a first surface of said core layer;

wherein a wavelength shift of said holographic image reconstructed from said holographic data memory by exposure to the incident light is observed; and

~~The method according to claim 30~~[[,]]

wherein the adjacent surface has an average roughness of about 5 μm to 25 μm so that said wavelength shift of said holographic image reconstructed from said core layer is about 20 nm.

32 [[30]]. (currently amended) The method according to claim [[28]] 31, further comprising increasing said roughness of said adjacent layer so as to increase said wavelength shift of said holographic image to shorter wavelengths.

33 [[31]]. (currently amended) The method according to claim [[28]] 31, wherein a regular relief is impressed onto a selected area of said adjacent layer through at least one of thermal and mechanical deformation.